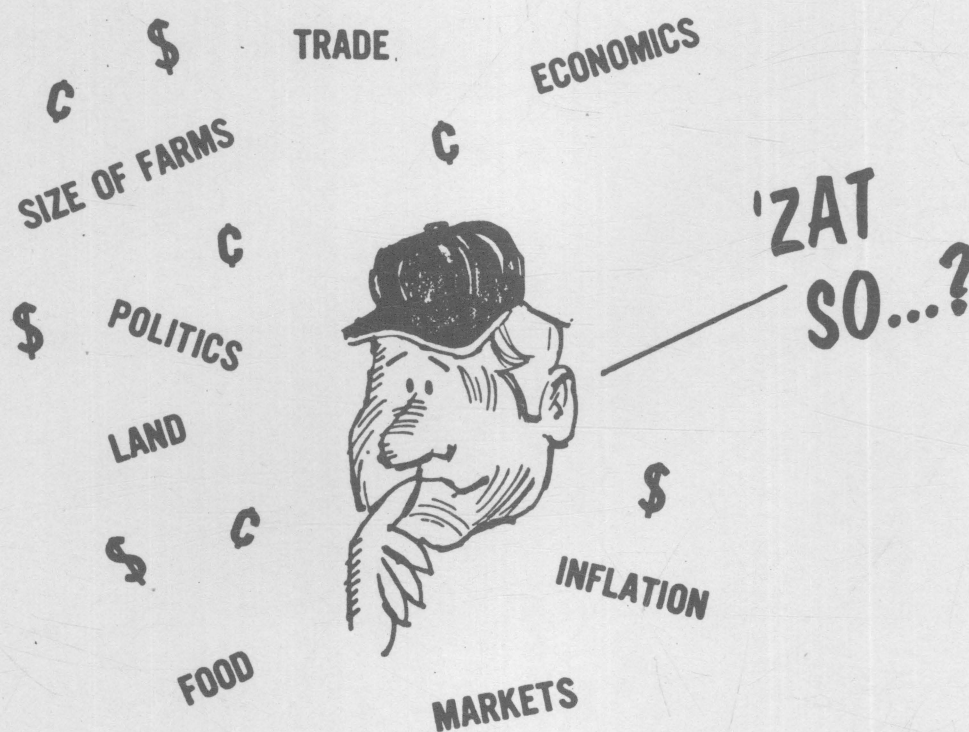


POLITICAL and ECONOMIC CLIMATE for FARMING

--an emphasis on where we are going



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COOPERATIVE EXTENSION SERVICE
THE OHIO STATE UNIVERSITY

March 1977

THE POLITICAL AND ECONOMIC CLIMATE FOR FARMING--
AN EMPHASIS ON WHERE WE ARE GOING

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After five very turbulent years, U. S. agriculture is in a strong economic position. Farm prices and incomes remain generally favorable although well below the peaks of 1973-74. Farm proprietor equities are high. There is less slack in the resource base than the economy as a whole. The serious distortions in the livestock/feed relationships have decreased and show some favorable signs. U. S. agriculture is operating in an essentially open and highly interdependent domestic and world market in which food demand has been pressing strongly upon available supplies. Most U. S. farmers are in a strong competitive position in world markets.

Even with the relatively healthy economic climate described for today's agriculture, U. S. farmers are more vulnerable to weather, trade, government policies and inflation. What will the policy and economic climate for farming be in the next five years? What does it mean to agriculture and to farm managers?

Some Expectations Influencing Agriculture

In attempting to put today's economic conditions into a longer run perspective, one quickly finds there are few precedents for today's clash of forces. Never have we had such an energy crunch. The current natural gas shortages and their "domino effects" on other energy sources is adversely affecting the country's factories, farms and homes. This on top of the raid on the world's treasures by the Organization of Petroleum Exporting Countries (OPEC) quintupling oil prices. Not in modern history

such global weather variability--heat, cold, drouth and flood--making for great uncertainty and consternation about global food and feed grain prices and supplies. Never such worldwide economic interdependence. Never such emphasis on environmental and consumer protection. Never such inflationary pressures in our 200 year history. Never such an arsenal of economic weapons like income transfer payments, investment credit, unemployment compensation, federal deposit insurance and Federal Reserve Board actions.

No matter how complex these forces, every farmer does develop some expectations about the economic and political climate in which he is going to operate. No one knows for sure what the precise conditions will be but farmers want their expectations used in decision-making to be as realistic as possible. Over the next five to ten years we think the odds favor the following scenario.

Price Levels

Where are we heading in regard to price levels? The answer: upward at an average rate far beyond those we have historically accepted as being reasonable.

The political system through monetary and fiscal policy will continue to give a higher priority to the goal of maintaining a high level of employment than to fighting inflation and maintaining a relatively stable money value. This means upward price trends unless we have expanded plant capacity and/or improved industrial labor productivity. There is reason for much pessimism about the chances of either occurring. Our high energy using society is experiencing rapidly escalating energy prices that mean higher consumer prices. Also some portion of inflation is due to demands for additional environment and consumer protection which results in a product bearing the additional costs of improved quality and safety. Inflation has been institutionalized through government mandated standards

and public goods demands that are passed on to consumers as higher taxes and prices.

The "bad news" is that annual increases in inflation and farm costs may average in the 4 to 7 percent range in the next five years. But the "good news" is that over long periods of time, farm product prices will follow the general price level and equal the rise in farm costs.

Farm Trade Prospects and Policy

It is unrealistic to expect farm exports to continue growing at recent rates. Over the next decade we should be able to maintain an export market growth averaging 3 to 4 percent per year. The purchasing patterns of the Soviets will be more stable because of the agreement to buy 6-8 million metric tons of feed grains and wheat in each of the five years. Even so, export volume and thus domestic farm prices will be erratic due to year to year variations in world economic conditions and weather. And there is evidence that world weather conditions are worsening at least compared to the very favorable 1960's. The world financial balance grows more ominous due to the effect of higher energy costs on most nations. If our customers find themselves too hard pressed, we may need to lend them more money or lose some sales. Around the world, production responses to higher commodity prices and governmental policies are bringing forth greater output. This increased output comes from both importing and exporting countries.

In the longer run, world population growth in the less developed nations plus modest income improvement in the developed nations augers well for U. S. farm exports. U. S. farmers have the comparative advantage in producing soybeans and feed grains. The U. S. tends to be a residual supplier of wheat, and possibly, feed grains. The conditions enumerated subject U. S. grain farmers to price instability and livestock producers

to highly variable input costs and risk.

For the conclusion to be valid that the volume of farm products exported will expand (but irregularly) in the longer run one must assume that commercial trade will be encouraged, and that nationalism and self-sufficiency in the U. S. and around the world will be thwarted by recognition that trade contributes to higher levels of living. In addition, it is assumed no major trade war breaks out from an OPEC embargo or other countries restricting exports of critical goods.

Issues in regard to how much food aid will go to the needy in less developed countries (LDC's) will be recurring. The 1985 food needs of LDC's, even with no changes in diet, will require three times the volume ever experienced. The real outcome in the LDC's may be a blend but the alternatives are to 1) produce food themselves, 2) expand economic growth and income so they can buy enough food to maintain diets, or 3) face dietary erosion, malnutrition and starvation for a portion of their population. Expansion in food aid (only 2 percent of our farm exports in 1976) will depend upon the supply and prices plus the willingness of U. S. taxpayers to increase their public and/or private giving. Technical assistance aid to increase economic development and their food buying power is more likely.

Imports of farm products will continue to grow for both competitive and noncompetitive products, but our farm trade balance should remain very favorable. The domestic energy and balance of payments situation require policies and programs encouraging the export of large quantities of U. S. farm products.

The U. S. may be faced with two pressures to increase farm imports. One is from the less developed countries to give them preferential treatment (commodity agreements or other means) so they might earn more foreign

exchange and, in effect, redistribute the world's wealth. The second is that the U. S. will be under continuing pressure to reduce our restrictions on the imports of beef, milk and cheese.

Government Programs

Governmental policies related to agriculture have been dramatically shifted. We have moved from a farm program restricting farm output to a more market oriented system featuring food demand policies. Feeding the poor through supplemental means like food stamps, school milk, school breakfast, "meals on wheels" and other "feed the elderly" programs have gained in importance. Subsidizing food consumption of the middle and upper income families through the school lunch program continues to receive ready approval by Congress. These domestic demand expansion programs now account for about 3 percent of the farm level demand for food and take nearly \$7 billion or about 50 percent of the USDA budget. The annual cost far exceeds the payments made to producers in the early 1970's for retiring land. Feeding programs for the poor will continue but expansion in the demand for food exceeding the current level of about 3 percent seems unlikely.

Farm programs in the next five years seem likely to feature a target-loan system using a "cost of production" to establish the levels. The past rapid escalation of food prices has encouraged consumer groups and those concerned with feeding poor people in other lands to insist upon reserves. It appears that reserves will be held by farmers through storage incentives. The combination of a loan-reserve program gives farmers minimum prices and consumers food reserves in the same policy, thus neither group can strongly resist. Loans do give something for our money--reserves--rather than a transfer of money from taxpayers to farmers.

Food prices, farm prices and their stability; food aid for the low income consumer; food aid, trade and technical assistance for foreign

consumers become intertwined. The distribution of income is a basic economic issue, but it involves philosophical differences on how to deal with it. When agricultural and food legislation is enacted it will likely be specific to the issues of agricultural policy, domestic food aid policy, and foreign food policy.

Demand for Food

Consumers in the U. S. are among a select group of the world's population who face no serious threat of food shortages over the foreseeable future.

Domestic use of farm products may be expected to increase gradually and significantly at about 1.1 to 1.3 percent per year. Annual population growth, the single most important factor, is expected to increase by 0.8-0.9 percent per year. Improving incomes will provide the additional source to total domestic demand for U. S. farm products.

Exports are expected to increase at an average rate of 3 to 4 percent per year. The U. S. share of world trade in farm products should expand slightly. The export market may take the products from about one-third of the cropland harvested by 1982-85. On a value basis, it is expected that exports will provide around 25 percent of the total receipts from cash farm marketings.

Combining the expected domestic and export demand (need plus money) for farm products the total annual growth should average 1.3 to 1.6 percent per year. But any year may be higher or lower due to such factors as weather, balance of payments and world economic conditions.

Output in Farming

U. S. farm output continues at high levels. But, output per unit of input has slowed in recent years. Major reasons for the slowdown in output

per unit of input 1) the best technologies have been used and the rate of development of dramatic new techniques has slowed, 2) ecological restraints have increased costs, and 3) expanding use of marginal land. Higher yields contributed to the expansion of total output in the last five years. But we used about 40 million more acres of land than in 1970.

The major sources of increased output in the next few years will be continued substitution of capital for labor and better use of technology. This will decrease labor input, increase yields and lower put unit production costs. Other sources of improved productivity are farm consolidation and adoption of new technologies to farming. It seems relatively easy for U. S. farmers to increase output by the total demand requirement of 15 to 20 percent in the next decade. Exceeding the output needs will lead to lower prices and incomes. And we have the propensity to produce large quantities.

Meaning to Farmers

These national and international changes will "push and pull" farmers in diverse directions in the next five years. At times, narrow margins and continued price uncertainty will test the capabilities of many operators. In the final analysis, the individual farmer's decisions and his actions bring about success or failure. Following are some major factors that individual producers may want to consider.

Farms and Farm Size

The long term trend toward fewer and larger farms will continue. Since 1960, farm numbers shrank from 4 million to 2.7 million--a drop of over 30 percent. The greatest decline was in those farms of less than 180 acres; the number of farms with 500 acres or more increased significantly. The 450,000 larger commercial farmers (16 percent of the total that annually

sell over \$40,000 of farm products per farm) account for 70 percent of the total farm sales and 60 percent of the net farm income. These larger farms will increase in number and receive a larger share of the total value of farm production as they continue to gain control of additional resources. They will benefit from either higher prices and incomes or their neighbor's financial stress or both in the upcoming decade.

Nearly two-thirds of all farms have total sales of under \$20,000. They produce only 11 percent of the value of all farm products sold. A large portion of these are part-time farmers with total family incomes that compare favorably with nonfarm people. As a group they have a lot of "staying power." In addition, this type of farm may come into heavy demand by people with city jobs wishing to supplement their income by farming or realize some non-economic objectives associated with part-time farming.

Farmers selling \$20,000 to \$39,999 of farm products annually make up about one-fifth of the total number of farms and one-fifth of all sales. Some are part-time farmers. Many are older and will forego expansion but will need to modernize their operations and practices. The younger people with this size farm will 1) either expand the scope of their farm operation and move into the larger commercial class, 2) quit farming, or 3) join the ranks of the part-time farmers and shift to more extensive farming operations.

Labor Productivity

Output per worker in farming has increased at an annual rate of about 6.0 percent in the last decade. To keep pace with this competition, the average farmer will need to increase his output per worker at an annual rate of 6.0 percent. To catch up with the average producer, the younger and/or smaller commercial farmer needs to think of annual increases in output per worker exceeding 10 percent. Some of the increase can come

from improving yields but the remainder must come from more intensive operations or farm enlargement.

Minimum Size Economic Units

The larger commercial farm operations will continue to move toward two, three or four man units. This provides the opportunity for labor specialization and for the amenities enjoyed by nonfarm people like vacations and shorter work week. Producers wanting to expand need to figure on the production per man of 500-600 acres of field crops. In the livestock enterprise, including feed production, size of operation per man needs to reach 800-1000 head of hogs marketed per year; about 50-60 dairy cows; 250-300 beef cows, and in cattle feeding 400-500 steers marketed.

For enterprises with feed purchased, an egg laying operation needs to be 40,000-50,000 hens per man; an outdoor turkey operation should number 40,000-50,000 per man per year and 250,000 broilers per man per year. About 60 percent of the cattle fed are in lots of 20,000 head or more. This percentage will increase as the industry recovers from recent feeding losses.

Corporate or Family Farms

Corporate ownership of farms will increase, but major growth by nonfarm corporations does not seem likely. Today only about 1 percent of all the farms are incorporated. They do sell 14 percent of the farm products. The traditional family farms will likely move toward incorporation to ease the transfer of property from one generation to another, utilize tax advantages and to acquire capital. Most have 10 or fewer shareholders and are indistinguishable from other farms operated by partnerships or single proprietors that are typically considered family farms.

Part-time Farming

The importance of part-time farming will increase. For many farmers, off-farm employment for the operator and family members may be the only way to remain in farming and achieve an acceptable level of living. In contrast, the smaller and medium sized farms may come into heavy demand by people with city jobs who wish to supplement their income by farming.

Today, one out of two farm families earn more than half their income from nonfarm sources. With a continued shift to decentralized industry and population, the share of farm families earning a major share of their income off the farm will climb even higher in the next decade.

Farm Tenure

In the U. S., full owner-operators continue to make up about 65 percent of the total. Part owner-operator status is growing and now accounts for over 25 percent of the total farm operations--up from 15 percent in 1950. Full tenancy is declining and makes up about 10 percent of the total farming operations. These trends are expected to continue. Producers are increasingly separating ownership from use of land and other high capital resources. Today, lease or rental of land accounts for over 40 percent of all land used in farming. High land values and high capital needs seem likely to convince farmers to lease land and equipment.

Investment

Farm indebtedness in the next five years will rise because of inflation and the increasing size and complexity of farming operations.

Investment in agriculture in 1976 reached \$585 billion. The annual increase in the last decade was about 11 percent but heavily influenced by the 50 percent increase in the last four years. Debt as a percent of assets has varied between 15 and 17 percent in the last decade and may

remain so in the years ahead. About two-thirds of the total annual cash flow for purchase of real estate, capital improvements and production costs has been generated by income and savings. This is also true for the large commercial farms that sell \$100,000 or more annually and in which the amount of total farm expenditures averages nearly \$220,000. The remaining one-third of the expenditures was secured by real estate or tangible property. No shortage of capital is foreseen; interest rates will likely exceed the annual rate of inflation by about 3 percent. Land contract sales will expand as sellers of land look at income tax impacts and buyers look at pressures to acquire more land.

Farm Inputs

In the last five years land prices have more than doubled due to 1) the big bulge in net farm income, 2) security demand for land, 3) real estate tax relief, 4) more favorable financing by the Federal Land Bank, 5) land demand for farm enlargement, and 6) nonfarm uses of land. A leveling off in land values seems in store as returns to farmland have declined. Land values may decline for a short time if net farm incomes are severely squeezed. But over the long haul, land prices and land rents will rise at a rate that will at least equal, but probably exceed the rise in the general price level.

Hired farm labor costs will rise faster than nonfarm wages as farm workers receive more fringe benefits and wage rates approach nonfarm wages. This encourages further mechanization. Gains from farm mechanization tend to come from a larger volume rather than from lower unit costs.

The severe 1977 winter weather has rudely reminded much of the U.S. population of the country's energy problems. Some good may result if coherent energy conservation, research and development, and government

energy regulation policies and programs are developed. The current natural gas shortage has closed many nitrogen fertilizer plants in the country. Higher natural gas prices can be expected to increase the cost of producing nitrogen fertilizer. But, installed nitrogen fertilizer capacity plus planned construction around the world suggests nitrogen supplies should exceed projected demand. In the longer run, nitrogen fertilizer production capacity may be the key factor influencing prices. Remember, the Middle East has enormous natural gas supplies, but much is currently being "flared." In the meantime, the energy shortage may encourage adoption of minimum tillage practices that cut fuel costs in half or more without decreasing yields on many soil types.

Livestock Production

Livestock operations will continue to move to full-owner or part-owner operated farms. The net affect is the need for more highly skilled labor and higher compensation. The management of additional employees may be the key to increasing size. Narrower margins reduce the degree of error permissable and require higher levels of management. When negative returns are experienced there is nothing worse than being "big and bad." Landlords will be increasingly reluctant to make large investments in economic sized livestock units; tenants will be reluctant to use outmoded facilities.

Economic Organization and Market Practices

Increased coordination of agricultural production and marketing by the food processing and farm supply industries can be expected. Poultry, sugar cane, citrus and specialized vegetables are examples of unified vertically integrated systems linking suppliers, farmers and marketers.

Our affluent society wants a steadier flow, higher quality and more standardized supply of food. The outside pressure will result in an increase in contracting and other marketing and bargaining arrangements. Some of the pressure will occur from the farmer, some from farm supply firms, and some from the processor-distributor as participants seek some resource-providing or market-assuring agreement with other participants. Some marketing efficiencies can be gained but at the loss of decision-making freedom. The more prevalent organization may be contract integration, cooperative integration and/or vertical integration through ownership of two or more stages of production.

Producers facing lower margins, higher financial burdens, unstable markets and greater uncertainties will need to reduce risks. Creditors on large or risky loans will increasingly require borrowers to "lock in profits" through use of forward contracts and/or futures market contracts. On farm storage arrangements will continue to expand. Price instability and the need to more fully employ farm labor may encourage greater crop and livestock diversification. In cattle feeding there may be a slight movement toward more highly integrated arrangements; more slowly in hogs. There is little likelihood of tight coordination in grains.

Management Practices

Financial management, record keeping, tax management, estate planning and the form of business organization and labor management will be of increasing importance. The large investment (equity or borrowed) per farm, narrower margins, increased market coordination and quality control will necessitate such changes. The source and quality of production and market information made available by the land grant institutions, USDA, farm supply firms and marketing organizations and the interpretation of such information will be of increasing importance.

Summary

The average earnings of large commercial farmers in the next five years should be good. Production returns on equity capital should be adequate. When augmented by land appreciation, the total returns should be favorable. This means a relatively good climate for those operators who have control of adequate resources, who market wisely and have good management. Those farmers unable, whether smaller or for other reasons, to make adjustments will be under severe pressure. The casualty rate of those financially overextended or lacking management capabilities will be high.